

AMENDMENT TO THE CLAIMS

The following claim set replaces all prior versions, and listings, of claims in the application:

1. (currently amended) Process for the preparation of melamine comprising:
preparing at least two melamine-containing flows in at least two different
processes for the preparation of melamine from urea, wherein at least one
of the melamine-containing flows contains melamine made from a low-
pressure gas-phase process for the preparation of melamine, and at least
one other of the melamine-containing flows contains melamine made from
a high-pressure liquid-phase process for the preparation of melamine,
[[and]]
bringing together in a first mixing step the at least two melamine-containing flows
to form a mixture thereof, and
cooling the mixture in a cooling step to obtain solid particulate melamine having a
particle size D₉₀ of between 10 µm to 1000 µm.
2. (currently amended) Process according to claim 1, wherein the step of at least
one melamine-containing flow contains gaseous and/or liquid melamine, and
~~wherein the process further comprises~~ cooling the mixture is practiced in a
~~cooling step, during or after the first mixing step, and wherein the mixture is~~
cooled to a temperature below 250⁰C.
3. (previously presented) Process according to claim 2, wherein the cooling step
comprises bringing the mixture into contact with an aqueous phase.
4. (previously presented) Process according to claim 2, wherein at least one of the
melamine-containing flows contains water as a continuous phase, and wherein
the cooling step is practiced during the mixing step by mixing the at least one

melamine-containing flow which contains water as the continuous phase with at least one other melamine-containing flow.

5. (previously presented) Process according to claim 2, wherein the cooling step comprises bringing the mixture into contact with gaseous and/or liquid ammonia.
6. (cancelled)
7. (currently amended) Process according to claim 1, comprising a second mixing step, during or after the first mixing step, which comprises bringing the mixture into contact with an aqueous phase, and wherein the cooling step includes ~~followed by~~ a crystallization step which comprises cooling the mixture by at least 5°C to form the solid particulate melamine, followed by a separation step comprising isolating the solid melamine from the mixture.
8. (previously presented) Process according to claim 7, further comprising dissolving virtually all the melamine in a dissolving step during or after the second mixing step and prior to the crystallization step with the aid of heating and/or the addition of an aqueous flow.
9. (previously presented) Process according to claim 1, wherein at least one of the melamine-containing flows contains water as a continuous phase, and wherein the mixture after the first mixing step is subjected to a crystallization step which comprises cooling the mixture by at least 5°C to form solid melamine, followed by a separation step which comprises isolating the solid melamine from the mixture.
10. (currently amended) Process according to claim 9, wherein the melamine-containing flow which contains water as the continuous phase contains melamine originating from ~~[[a]]~~ the low-pressure gas-phase process and is saturated to between 70% and 110% with melamine.
11. (cancelled)

12. (previously presented) Process according to claim 8, wherein the mixture is subjected to a purification step after the dissolving step and prior to the crystallization step, and wherein the purification step comprises:
 - treating the mixture with NH_3 at a pressure between 1 MPa and 20 MPa and a temperature between 100°C and 250°C ,
 - and optionally conducting an adsorption step and/or a filtration step.
13. (previously presented) Process according to claim 7, comprising cooling the mixture in the crystallization step to a temperature between 100°C and 25°C .